1.0 EXECUTIVE SUMMARY

PURPOSE

The purpose of the Executive Summary is to provide the reader with a clear and simple description of the proposed project and potential environmental impacts. Section 15123 of the *California Environmental Quality Act (CEQA) Guidelines* requires that the summary identify each significant effect, and recommended mitigation measures and alternatives that would reduce or avoid potential significant impacts. The summary must also identify areas of controversy known to the lead agency, including issues raised by agencies and the public, and issues to be resolved including the choice among alternatives and whether or how to mitigate significant effects. This section focuses on the major areas of importance to decision makers and utilizes non-technical language to promote understanding.

PROJECT SITE LOCATION

The project site encompasses 16 parcels in the City of Santa Clarita approximately 2 miles north of State Route 14 (SR-14). The project site consists of portions of Via Princessa between Golden Valley Road in the west and Sheldon Avenue in the east.

The project site is currently undeveloped rural land consisting of hilly terrain with extensive native vegetation. Currently, there are two City of Los Angeles Department of Water and Power right-of-way crossings on the site, an aqueduct on the west side of the property, and an overhead power line corridor along the eastern side of the property.

The project site is located on the northeast flank of the San Gabriel Mountains within the central Transverse Ranges physiographic province of Southern California. The site elevation ranges from approximately 1,390 feet above mean sea level (msl) in the southwest portion of the site to approximately 1,830 feet above msl in the northeast portion of the site. The nearest surface water drainage is the Santa Clara River which is approximately 1 mile to the northeast.

PROJECT DESCRIPTION

The proposed project involves the construction of a new roadway segment between Golden Valley Road and the existing roadway terminus near Sheldon Avenue. The Via Princessa East Extension would be one of the primary east-west arterials through the City of Santa Clarita. The proposed roadway would be approximately 1.2 miles in length and is designated as a Major Arterial Highway per the City of Santa Clarita's Master Plan of Arterial Highways. The proposed roadway would consist of a six-lane facility with a 14-foot raised landscaped median, a 10-foot sidewalk/parkway on each side, and a 12-foot two-lane bike path along the south side. The vehicle lanes adjacent to the median would be 12 feet wide,

the middle lanes would be 11 feet wide, and the right lanes would be 12 feet wide. The typical right-of-way width would be 116 feet.

The portion of Via Princessa between Sheldon Avenue and Rainbow Glen Drive that is currently constructed as a half section would be completed by constructing the south side of the roadway. In this section, the roadway would be constructed to a typical right-of-way width of 104 feet, consistent with the original design for this section. The total project area, including remedial grading acreage is 25.2 acres.

TOPICS OF KNOWN CONCERN

To determine which environmental topics should be addressed in this EIR, the City of Santa Clarita prepared an initial study and circulated it along with the NOP from September 21, 2009, to October 21, 2009, in order to receive input from interested public agencies and private parties. As concluded in the initial study, the following topics are addressed in this document:

- Aesthetics
- Air Quality
- Biological Resources
- Geology and Soils
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Transportation/Circulation
- Cultural Resources
- Hazards/Hazardous Materials
- Climate Change

As concluded in the initial study, the following topics have not been included in this document because there is no potential for environmental impacts to:

- Agricultural Resources
- Mineral Resources
- Parks
- Recreation
- Schools
- Public Utilities (Wastewater, Water, Solid Waste)
- Libraries
- Population and Housing

IMPACTS, MITIGATION MEASURES, AND UNAVOIDABLE SIGNIFICANT IMPACTS

This EIR has been prepared to assess potentially significant impacts to the environment that could result from implementation of the proposed project. For a detailed discussion regarding potential impacts, refer to **Section 4.0**, **Environmental Impact Analysis**, of this EIR. In accordance with CEQA, a summary of project impacts is provided in the summary table (**Table 1.0-1**). Also provided in the summary table is a list of the proposed mitigation measures that are recommended in response to project impacts identified in this EIR, as well as a determination of the level of significance of the impact after implementation of the recommended mitigation measures.

ALTERNATIVES

This EIR discusses two alternatives to the proposed project, which are analyzed in **Section 6.0, Alternatives**, of this EIR. These alternatives include the No Project Alternative and the Robert C Lee Parkway Alternative. Each is described below along with a summary of the comparative impact analysis contained in **Section 6.0**.

No Project Alternative

The No Project Alternative - the eastward extension of Via Princessa between Golden Valley Road and the existing roadway terminus near Sheldon Avenue would not occur. Under the No Project Alternative, the proposed project would not be constructed.

The significant and unavoidable impacts identified in **Section 4.0** of this EIR would not occur with the implementation of the No Project Alternative. The impact to visual resources would not occur because no grading would occur. Air quality and noise impacts would not occur because estimated air pollutant emissions and noise levels associated with construction machinery would not be generated. Impacts to biological resources would not occur because vernal pools would not be removed from the site. Implementation of the No Project Alternative would not achieve any of the objectives established for the project components. Generally, the No Project Alternative would result in fewer impacts than those evaluated for the proposed project, except for transportation and circulation impacts.

While the No Project Alternative is generally considered environmentally superior to the proposed project, it does not meet any of the project objectives including:

- Implement the goals of the Circulation Element of the Santa Clarita General Plan, including connectivity between Golden Valley Road and Rainbow Glen Drive;

There would be no roadway connection between Golden Valley Road and Rainbow Glen Drive. As such, the No Project Alternative would not implement goals of the Circulation Element of the General Plan.

- Improve local access to residential and commercial areas within the City of Santa Clarita

There would be no additional roadway construction with implementation of the No Project Alternative. Therefore, access to residential and commercial areas would not be improved within the City.

- Improve roadway level of service and the circulation network
- Reduce vehicle miles traveled by creating a more direct route for motorists and eliminating circuitous driving patterns

The No Project Alternative would not improve the local circulation network in the near future. Unacceptable levels of service along Golden Valley Road and Sierra Highway would occur with the No Project Alternative.

- Promote opportunities for new development by extending needed infrastructure systems

The No Project Alternative would not develop or extend needed infrastructure systems.

- Help close a gap segment in the City's planned roadway system

The No Project Alternative would not develop additional roadway improvements called out in the City's General Plan. As such, it would not close a gap segment in the City's planned roadway system.

Overall, the No Project Alternative would be environmentally superior, as it would avoid all identified significant impacts. However, the No Project Alternative would not achieve any of the project objectives.

Robert C. Lee Parkway Alternative

Under the Robert C. Lee Parkway Alternative, the east extension of Via Princessa would connect at the cul-de-sac of Robert C. Lee Parkway. Robert C. Lee Parkway would extend north, paralleling the Los Angeles Department of Water and Power (LADWP) transmission lines to connect at the existing Via Princessa terminus near Sheldon Avenue, as shown on **Figure 6.0-1**. The length of the Robert C. Lee Parkway Alternative would be approximately 0.5 mile.

The Robert C. Lee Parkway Alternative would result in fewer impacts to cultural resources, geology and soils, global climate change, and biota as the conceptual design would avoid the significant and unavoidable impacts to vernal pools and vernal-pool related dependent species.

While the Robert C. Lee Parkway Alternative is generally considered environmentally superior to the proposed project, it does not meet all of the project objectives including:

- Implement the goals of the Circulation Element of the Santa Clarita General Plan, including connectivity between Golden Valley Road and Rainbow Glen Drive

The Robert C. Lee Parkway Alternative would change the alignment designated in the City's Circulation Element. As a result, the alternative would require a General Plan Amendment.

Environmentally Superior Alternative

State CEQA Guidelines Section 15126.6(e)(2) requires an EIR to identify an environmentally superior alternative among those evaluated in an EIR. Of the alternatives considered in this section, the No Project Alternative is environmentally superior to the other alternatives, because this alternative would avoid the significant impacts identified for the proposed project. According to the *State CEQA Guidelines* if the No Project Alternative is identified as the environmentally superior alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. The Robert C. Lee Parkway Alternative would result in similar or incrementally fewer impacts for most issues when compared to the proposed project. In particular, the Robert C. Lee Parkway Alternative would have fewer impacts with respect to cultural resources, geology and soils, global climate change and biota including the avoidance of a significant and unavoidable impact to vernal pools and vernal-pool related species.

However, the potential for traffic hazards travelling through the project area adjacent to Golden Valley High School would be greater than that of the proposed project.

AREAS OF CONTROVERSY

During the circulation of the Notice of Preparation and Initial Study to public agencies, several issues were raised which are addressed in the EIR.

- During Construction: Dust and Debris
- After construction: Ingress and egress from tract
- Traffic

PROJECT APPROVALS AND ENTITLEMENTS

The proposed project would be part of the City's Capital Improvement Program. The City Council is the City's decision-making body and is responsible for approving projects to be built within City limits. Prior to approving the proposed project, the City Council must certify that (1) this EIR has been reviewed and considered; (2) the EIR has adequately analyzed the potential impacts of the proposed project; (3) it has

been completed in compliance with CEQA, the *State CEQA Guidelines*, and the City's Environmental Guidelines; and (4) it reflects the independent judgment of the City Council.

The project would also require the approval of an Oak Tree Permit and Hillside Review Permit at such time that development occurs or when funding of roadway construction becomes available. In order to allow for the proposed development to occur, MC# 09-108 would require an Oak Tree Permit and a Hillside Review Permit. The Oak Tree Permit would be required to determine the oak tree impacts at the time of project development. The Hillside Review Permit would permit the grading necessary to construct the roadway. These entitlements will be obtained at such time that roadway funding is available or concurrent with a development project. Because it is not known at this time when the project would be funded or built and permits expire after 2 years, it was determined to be more cost effective to wait until such time that construction of the roadway is eminent to secure permits for the project. In the case of oak trees, those oaks on the project site that are not currently of ordinance size may be large enough to qualify at a later date.

RESPONSIBLE AGENCIES

Under CEQA, a public agency, other than a lead agency, that has discretionary approval power over the proposed project is considered a "responsible agency" (*State CEQA Guidelines* Section 15381). No public agency, other than the City of Santa Clarita, has discretionary approval power over the proposed project; however, if the City approves this project, subsequent implementation of various project components could require discretionary approval authority from responsible agencies including, among others:

- California Department of Fish and Game
- Metropolitan Water District of Southern California
- US Army Corps of Engineers

Table 1.0-1
Summary of Project Impacts and Recommended Mitigation Measures

Project Impacts	Recommended Mitigation Measures	Residual Impact
4.1 AIR QUALITY		
The air quality assessment for the proposed Via Princessa East Extension project ("project" or "proposed project"), located in the City of Santa Clarita, California, was prepared in accordance with the South Coast Air Quality Management District's (SCAQMD) California Environmental Quality Act (CEQA) Air Quality Handbook[1] and other guidance provided by the SCAQMD. The proposed project consists of the extension of the Via Princessa roadway to make it one of the primary east-west arterials through the City of Santa Clarita. The project is about 1.2 miles in length and will be a six-lane facility with sidewalks on each side of the roadway and would include a two-lane bike path along the south side of the project. • The impacts associated with construction of the proposed project were compared to the thresholds of significance established by the SCAQMD. Thresholds of significance are used to assess the impacts from projected mass daily emissions of volatile organic compounds (VOCs), oxides of nitrogen (NO_X), carbon monoxide (CO), sulfur dioxide (SO_2), respirable particulate matter less than 10 microns in diameter (PM10), and fine particulate matter less than 2.5 microns in diameter (PM2.5) during project construction. The proposed project would not result in direct operational emissions other than periodic maintenance of the roadway; therefore, operational emissions would be qualitatively analyzed. In addition, the SCAQMD has promulgated localized significance thresholds (LSTs) in the SCAQMD Final Localized Significance Threshold Methodology[2] (LST Methodology) that identify local ambient air impacts during project construction for nitrogen dioxide (NO_2), CO, PM10, and PM2.5. In addition, the SCAQMD requires an evaluation of the project's impact on local CO concentrations near impacted intersections and roadways as well as an evaluation of impacts from odors and toxic air contaminants at sensitive receptors.	**MM 4.1-1:** Prior to grading permit issuance, the project applicant and/or contractor shall develop a Construction Emission Management Plan to minimize construction-related emissions. At a minimum, the Plan shall require the following: • Suspend the use of all construction equipment during first-stage smog alerts. • Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 mph. • Post-January 1, 2015: All off-road diesel-powered construction equipment greater than 50 horsepower shall meet Tier 4 off-road emissions standards. In addition, all construction equipment shall be outfitted with the Best Available Control Technology (BACT) devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. A copy of each unit's certified tier specification, BACT determination, and CARB or SCAQMD operating permit shall be provided at the time of mobilization of each applicable unit of equipment. • Use electric welders to avoid emissions from gas or diesel welders, to the extent feasible. Equipment that is commercially available shall be considered to be feasible. Equipment that is in the development, testing, or demonstration stage shall be considered not feasible. • Use electricity or alternate fuels for on-site mobile equipment instead of diesel equipment, to the extent feasible. Equipment that is commercially available shall be considered to be feasible. Equipment that is in the development, testing, or demonstration stage shall be considered not feasible.	Localized Construction Emissions would be Significant and Unavoidable

1 South Coast Air Quality Management District, *CEQA Air Quality Handbook*, 1993.

2 South Coast Air Quality Management District, *Final Localized Significance Threshold Methodology*, 2008.

Project Impacts	Recommended Mitigation Measures	Residual Impact
4.1 AIR QUALITY (CONTINUED)		
• Based on the results of the air quality assessment, construction and operational emissions of the proposed project would not exceed the SCAQMD thresholds of significance. The proposed project's emissions during project construction would temporarily exceed the localized ambient concentration thresholds for PM10 and PM2.5 at nearby sensitive receptors. The proposed project would not lead to the formation of CO hotspots due to project-related vehicular traffic. Furthermore, the proposed project would not result in an odor nuisance and would not emit substantial toxic air contaminants that would exceed health-based standards. Mitigation measures described later in this section would reduce the construction emissions of the proposed project, but localized construction emissions would be significant and unavoidable.	**MM 4.1-1: (continued)** • Use on-site electricity or alternative fuels rather than diesel-Equipment that is commercially available shall be considered to be feasible. Equipment that is in the development, testing, or demonstration stage shall be considered not feasible. • Maintain construction equipment by conducting regular tune-ups according to the manufacturers' recommendations. • Minimize idling time either by shutting equipment when not in use or reducing the time of idling to 5 minutes as a maximum. • Minimize the hours of operation of heavy-duty equipment and/or the amount of equipment in use at any one time. • Apply water three times daily, or non-toxic soil stabilizers according to manufacturers' specifications, to all unpaved parking or staging areas, unpaved road surfaces, and active construction areas. • Apply non-toxic soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for four days or more). • Install wheel washers or shaker plates to minimize dirt track out and dust generation where vehicles enter and exit the construction site onto paved roads or wash off trucks and any equipment leaving the site each trip. • Traffic speeds on all unpaved roads to be reduced to 15 mph or less. • All trucks hauling dirt, sand, soil, or other loose materials are to be covered. • Sweep streets at the end of the day if visible soil is carried onto adjacent public paved roads (recommend water sweepers with reclaimed water).	

Project Impacts	Recommended Mitigation Measures	Residual Impact
4.2 BIOLOGICAL RESOURCES		
The proposed project would result in the permanent conversion of, or temporary disturbance to, 13.0 acres of California annual grasslands, 0.7 acre of foothill needlegrass grassland, 10.4 acres of California sagebrush scrub, 10.2 acres of California buckwheat scrub, 33.1 acres of chamise chaparral, 23.9 acres of hoaryleaf ceanothus chaparral, 1.9 acres of riparian communities, 0.19 acre of vernal pool habitat, 0.05 acre of hillside seep habitat, and 7.3 acres of disturbed areas. Significant impacts would result with respect to the loss of foothill needlegrass grassland, riparian communities, vernal pool habitat, and hillside seep habitat; the loss of habitat for common and special-status wildlife species, including riparian-dependent and vernal-pool dependent species; potential construction-related loss of nests of common and special-status bird species; the loss of California Native Plant Society (CNPS) List 1B, and federally Threatened special status plant species; the loss of protected oak trees; the potential loss of federally Threatened and Endangered fairy shrimp species, and additional non-listed special-status animal species; the loss of 0.51 acre of California Department of Fish and Game (CDFG) and 0.85 acre of US Army Corps of Engineers (USACE) jurisdictional areas; and indirect impacts including increased lighting and glare, increased landscaping irrigation and stormwater runoff, an increase in non-native plant and wildlife species, increased human activity and domestic animal presence, and increased erosion and dust resulting from construction and grading activities. Implementation of mitigation measures required by this EIR would mitigate some, but not all, of the identified project-specific impacts to less than significant levels. Significant unavoidable impacts would occur due to the loss of vernal pool habitat and vernal pool-dependent species. The project would also contribute to a significant unavoidable cumulative impact related to the ongoing loss of biological resources in the project region.	**MM 4.2-1:** Vegetation types temporarily impacted by the proposed project, including those within CDFG and USACE jurisdictional areas, shall be revegetated with the same vegetation type except for the California annual grassland. To facilitate restoration, mulch, or native topsoil (the top 6 to 12 inch deep layer containing organic material), may be salvaged from the work area prior to construction. Following construction, salvaged topsoil shall be returned to the work area and placed in the restoration site. Within one year, the project biologist will evaluate the progress of restoration activities in the temporary impact areas to determine if natural recruitment has been sufficient for the site to reach performance goals. In the event that native plant recruitment is determined by the project biologist to be inadequate for successful habitat establishment, the site shall be revegetated through seeding or container plants, and a temporary irrigation system may be recommended. In conjunction with the development of mitigation plans for CDFG 1602 and USACE 404 permits, the above-described revegetation plan shall be developed so as to be consistent with CDFG and USACE requirements.	Significant and Unavoidable Vernal Pool Loss and Vernal Pool Habitat

Project Impacts	Recommended Mitigation Measures	Residual Impact
4.2 BIOLOGICAL RESOURCES (CONTINUED)		
	MM 4.2-2: The revegetation site will be considered "complete" upon meeting all of the following success criteria: 1. Regardless of the date of initial planting, any restoration site must have been without active manipulation by irrigation, planting, or seeding for a minimum of three years prior to Agency consideration of successful completion. 2. The percent cover and species richness of native vegetation type shall be evaluated based on local reference sites established by CDFG and the USACE for the plant communities in the impacted areas. 3. Native shrubs and trees shall have at least 80 percent survivorship after two years beyond the beginning of the success evaluation start date. This may include natural recruitment. 4. Non-native species cover will be no more than 5 percent absolute cover through the term of the restoration. 5. Giant reed (*Arundo donax*), tamarisk (*Tamarix ramosissima*), perennial pepperweed (*Lepidium latifolium*), tree of heaven (*Ailanthus altissima*), pampas grass (*Cortaderia selloana*) and any other species listed on the California State Agricultural list, or Cal-IPC list of noxious weeds will not be present on the revegetation site as of the date of completion approval.	Less Than Significant
	MM 4.2-3: An annual mitigation status report shall be submitted to the USACE and CDFG by April 1 of each year until satisfaction of success criteria identified in **MM 4.2-2**. This report shall include any required plans for plant spacing, locations of candidate restoration and weed control sites or proposed "in-lieu fees," restoration methods, and vegetation type restoration performance standards. For active vegetation type creation sites, the report shall include the survival, percent cover, and height of planted species; the number by species of plants replaced; an overview of the revegetation type effort and its success in meeting performance criteria; the method used to assess these parameters; and photographs. For active exotics control sites, the report shall include an assessment of weed control; a description of the relative cover of native vegetation type, bare areas, and exotic vegetation type; an accounting of colonization by native plants; and photographs.	

Project Impacts	Recommended Mitigation Measures	Residual Impact
4.2 BIOLOGICAL RESOURCES (CONTINUED)		
	MM 4.2-4 Replacement vegetation types shall be designed to replace the functions and values of the vegetation types being removed. The replacement vegetation types shall have similar dominant trees and understory shrubs and herbs (excluding exotic species) to those of the affected vegetation types (see **Table 4.2-6, Potential Plant Species for use in Site Restoration** for example of recommended plant species). In addition, the replacement vegetation types shall be designed to replicate the density and structure of the affected vegetation types once the replacement vegetation types have met the mitigation success criteria.	

Table 4.2-6
Potential Plant Species for use in Site Restoration

Trees	
blue elderberry	*Sambucus nigra* ssp. *caerulea*
coast live oak	*Quercus agrifolia* var. *agrifolia*
hollyleaf cherry	*Prunus ilicifolia* ssp. *ilicifolia*
Fremont cottonwood	*Populus fremontii* ssp. *fremontii*
arroyo willow	*Salix lasiolepis*
Shrubs	
skunk bush	*Rhus aromatica*
poison-oak	*Toxicodendron diversilobum*
California sagebrush	*Artemisia californica*
big sagebrush	*Artemisia tridentata* ssp. *tridentata*
mulefat	*Baccharis salicifolia*
pine-leaf goldenbush	*Ericameria pinifolia*
spineless horsebrush	*Tetradymia canescens*
thick-leaved yerba santa	*Eriodictyon crassifolium*
beavertail cactus	*Opuntia basilaris* var. *basilaris*
golden currant	*Ribes aureum*
chaparral currant	*Ribes malvaceum*
purple sage	*Salvia leucophylla*
black sage	*Salvia mellifera*
California buckwheat	*Eriogonum fasciculatum*
hoaryleaf ceanothus	*Ceanothus crassifolius*
buckbrush	*Ceanothus cuneatus*

Project Impacts	Recommended Mitigation Measures	Residual Impact
4.2 BIOLOGICAL RESOURCES (CONTINUED)		

Shrubs (continued)	
redberry	*Rhamnus crocea*
chamise	*Adenostoma fasciculatum*
mountain mahogany	*Cercocarpus betuloides* var. *betuloides*
toyon	*Heteromeles arbutifolia*
Whipple's yucca	*Yucca whipplei*
Herbs	
California goosefoot	*Chenopodium californicum*
California biscuitroot	*Lomatium californicum*
common lomatium	*Lomatium utriculatum*
scapellote	*Acourtia microcephala*
California thistle	*Cirsium occidentale* var. *californicum*
California aster	*Corethrogyne filaginifolia*
clustered tarplant	*Deinandra fasciculata*
fleabane aster	*Erigeron foliosus* var. *foliosus*
golden yarrow	*Eriophyllum confertiflorum* var. *confertiflorum*
slender sunflower	*Helianthus gracilentus*
coast goldfields	*Lasthenia californica*
California cottonrose	*Logfia filaginoides*
small wirelettuce	*Stephanomeria exigua*
wire-lettuce	*Stephanomeria pauciflora*
twiggy wreathplant	*Stephanomeria virgata*
everlasting nest-straw	*Stylocline gnaphaloides*
rancher's fireweed	*Amsinckia menziesii* var. *intermedia*
slender combseed	*Pectocarya linearis* ssp. *ferocula*
valley popcorn-flower	*Plagiobothrys canescens*
coastal chaparral morning-glory	*Calystegia macrostegia* ssp. *cyclostegia*
Peirson's morning-glory	*Calystegia peirsonii*
manroot	*Marah macrocarpus*
Santa Barbara milkvetch	*Astragalus trichopodus*
miniature lupine	*Lupinus bicolor*
stinging lupine	*Lupinus hirsutissimus*
blunt-leaved lupine	*Lupinus truncatus*
chia	*Salvia columbariae* var. *columbariae*
California wishbone bush	*Mirabilis laevis* var. *crassifolia*

<table>
<tr><th>Project Impacts</th><th>Recommended Mitigation Measures</th><th>Residual Impact</th></tr>
<tr><td colspan="3">4.2 BIOLOGICAL RESOURCES (CONTINUED)</td></tr>
<tr><td></td><td>
<table>
<tr><th colspan="2">Herbs (continued)</th></tr>
<tr><td>California suncups</td><td>Camissonia californica</td></tr>
<tr><td>miniature suncup</td><td>Camissonia micrantha</td></tr>
<tr><td>winecup clarkia</td><td>Clarkia purpurea ssp. quadrivulnera</td></tr>
<tr><td>California poppy</td><td>Eschscholzia californica</td></tr>
<tr><td>Turkish rugging</td><td>Chorizanthe staticoides</td></tr>
<tr><td>wavy-leaf soap plant</td><td>Chlorogalum pomeridianum var. pomeridianum</td></tr>
<tr><td>blue-eyed-grass</td><td>Sisyrinchium bellum</td></tr>
<tr><td>giant wildrye</td><td>Leymus condensatus</td></tr>
<tr><td>Coast Range melic</td><td>Melica imperfecta</td></tr>
<tr><td>foothill needlegrass</td><td>Nassella lepida</td></tr>
<tr><td>purple needlegrass</td><td>Nassella pulchra</td></tr>
<tr><td>one-sided bluegrass</td><td>Poa secunda ssp. secunda</td></tr>
</table>
Note: This is a list of potential recommended plants based on on-site floristic composition. Other species may be found suitable based on site conditions and state and federal permits.
</td><td>Less Than Significant</td></tr>
<tr><td></td><td>MM 4.2-5: Temporary irrigation shall be installed as necessary for plant establishment. Irrigation shall continue as needed until the restoration site becomes self-sustaining regarding survivorship and growth. Irrigation shall be terminated in the fall to provide the least stress to plants.</td><td></td></tr>
<tr><td></td><td>MM 4.2-6: All native riparian trees with a 3 inch dbh or greater in temporary construction areas shall be replaced using 1 or 5 gallon container plants, containered trees, or pole cuttings in the temporary construction areas in the winter following the construction disturbance. The growth and survival of the replacement trees shall meet the performance standards specified in MM 4.2-1. In addition, the growth and survival of the planted trees shall be monitored until they meet the self-sustaining success criteria in accordance with the methods and reporting procedures specified in MM 4.2-1, and MM 4.2-1.</td><td></td></tr>
<tr><td></td><td>MM 4.2-7: In order to reduce impacts to biological resources from grading and construction activities, all related activities will be conducted to facilitate the escape of animals to natural areas. Construction and grading activities will begin in disturbed areas in order to avoid stranding animals in isolated patches of vegetation type. Trenches will be covered at night to prevent animals from falling into and being trapped in trenches.</td><td></td></tr>
</table>

Project Impacts	Recommended Mitigation Measures	Residual Impact
4.2 BIOLOGICAL RESOURCES (CONTINUED)		
	MM 4.2-8: Within 30 days of ground-disturbing activities associated with construction or grading that would occur during the nesting/breeding season of native bird species potentially nesting on the site (typically March through August in the project region, or as determined by a qualified biologist), the applicant shall have weekly surveys conducted by a qualified biologist to determine if active nests of bird species protected by the Migratory Bird Treaty Act or the California Fish and Game Code are present in the disturbance zone or within 300 feet (500 feet for raptors) of the disturbance zone. The surveys shall continue on a weekly basis, with the last survey being conducted no more than three days prior to initiation of disturbance work. If ground-disturbing activities are delayed, then additional pre-disturbance surveys shall be conducted so that no more than three days will have elapsed between the survey and ground-disturbing activities.	
	MM 4.2-8 (continued) If active nests are found, clearing and construction within 300 feet of the nest (500 feet for raptors) shall be postponed or halted, at the discretion of the biologist in consultation with CDFG, until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting. Limits of construction to avoid an active nest shall be established in the field with flagging, fencing, or other appropriate barriers, and construction personnel shall be instructed on the sensitivity of nest areas. The biologist shall serve as a construction monitor during those periods when construction activities will occur near active nest areas to ensure that no inadvertent impacts to these nests occur.	

Project Impacts	Recommended Mitigation Measures	Residual Impact
4.2 BIOLOGICAL RESOURCES (CONTINUED)		
	MM 4.2-9: A Slender Mariposa Lily Mitigation and Monitoring Plan shall be submitted to CDFG for review and approval prior to ground disturbance to occupied habitat. Upon approval, the plan will be implemented by the applicant or its designee. The plan will demonstrate the feasibility of enhancing or restoring slender mariposa lily habitat in selected areas to be managed as natural open space without conflicting with other resource management objectives. Habitat enhancement or replacement will be at a 1:1 ratio (acres enhanced or restored: acres impacted). The plan will specify methods to collect propagules and introduce slender mariposa lily into these mitigation sites. Introductions will use source material (seeds or bulbs) from slender mariposa lily occurrences to be lost. The applicant or its designee will monitor the reintroduction sites for no fewer than five additional years to estimate slender mariposa lily survivorship (for bulbs) or seedling establishment (for seeded sites). Annual monitoring reports will be prepared and submitted to CDFG and will be made available to the public to guide future mitigation planning for slender mariposa lily. Monitoring reports will describe all enhancement or restoration measures taken in the preceding year; describe success and completion of those efforts and other pertinent site conditions (erosion, trespass, animal damage) in qualitative terms; and describe mariposa lily survival or establishment in quantitative terms.	
	MM 4.2-10: Prior to issuance of a grading permit, an Oak tree report shall be prepared and approved. All oaks that will not be removed that are regulated under the City of Santa Clarita's Oak Tree Preservation and Protection Guidelines with driplines within 50 feet of land clearing (including brush clearing) or areas to be graded shall be enclosed in a temporary fenced zone for the duration of the clearing or grading activities. Fencing shall extend to the root protection zone (*i.e.*, the area at least 15 feet from the trunk or 5 feet beyond the drip line, whichever distance is greater). No parking or storage of equipment, solvents, or chemicals that could adversely affect the trees shall be allowed within 25 feet of the trunk at any time. Removal of the fence shall occur only after the project arborist or qualified biologist confirms the health of preserved trees.	

Project Impacts	Recommended Mitigation Measures	Residual Impact
4.2 BIOLOGICAL RESOURCES (CONTINUED)		
	MM 4.2-11: Prior to the issuance of a grading permit for ground disturbance, construction, or site preparation activities, the applicant shall retain the services of a qualified biologist to conduct pre-construction surveys for western spadefoot within the vernal pool and all other portions of the project site containing suitable breeding habitat. Surveys shall be conducted during a time of year when the species can be detected (*i.e.*, when the vernal pool is inundated). 1. Under the direct supervision of the qualified biologist, western spadefoot habitat shall be created within suitable natural sites on the project site outside of the proposed development envelope. The amount of occupied breeding habitat to be impacted by the project shall be replaced at a 1:1 ratio. The actual relocation site design and location shall be approved by CDFG. The location shall be in a suitable habitat as far away as feasible from the impacted area. The relocation ponds shall be designed so that they only support standing water for several weeks following seasonal rains, in order that aquatic predators (*e.g.*, fish, bullfrogs, and crayfish) cannot become established. Terrestrial habitat surrounding the proposed relocation site shall be as similar in type, aspect, and density to the location of the existing ponds as feasible. No site preparation or construction activities shall be permitted in the vicinity of the currently occupied ponds until the design and construction of the pool habitat in preserved areas of the site has been completed and all western spadefoot adult, tadpoles, and egg masses detected are moved to the created pool habitat. 2. Based on appropriate rainfall and temperatures, generally between the months of February and April, the biologist shall conduct pre-construction surveys in all appropriate vegetation types within the development envelope. Surveys will include evaluation of all previously documented occupied areas and a reconnaissance-level survey of the remaining natural areas of the site. All western spadefoot adults, tadpoles, and egg masses encountered shall be collected and released in identified or created relocation ponds described above.	

Project Impacts	Recommended Mitigation Measures	Residual Impact
4.2 BIOLOGICAL RESOURCES (CONTINUED)		
	MM 4.2-11: (continued) 3. The qualified biologist shall monitor the relocation site for five years, involving annual monitoring during and immediately following peak breeding season so that surveys can be conducted for adults as well as for egg masses and larval and post-larval toads. Further, survey data will be provided to CDFG by the monitoring biologist following each monitoring period and a written report summarizing the monitoring results will be provided to CDFG at the end of the monitoring effort. Success criteria for the monitoring program shall include verifiable evidence of toad reproduction at the relocation site.	

Project Impacts	Recommended Mitigation Measures	Residual Impact
4.2 BIOLOGICAL RESOURCES (CONTINUED)		
	MM 4.2-12: Prior to project construction, the applicant shall develop a relocation plan for coast horned lizard, silvery legless lizard, coastal whiptail, rosy boa, San Bernardino ringneck snake, and coast patch-nosed snake. The plan shall include but not be limited to the timing and location of the surveys that would be conducted for each species; identification of the locations where more intensive efforts should be conducted; identification of the habitat and conditions in the proposed relocation site(s); the methods that would be utilized for trapping and relocating the individual species; and shall provide for the documentation/recordation of the species and number of the animals relocated. The Plan shall be submitted to CDFG for approval 60 days prior to any ground disturbing activities within potentially occupied habitat. The plan shall include the specific survey and relocation efforts that would occur for construction activities that occur both during the activity period of the special-status species (generally March to November) and for periods when the species may be present in the work area but difficult to detect due to weather conditions (generally December through February). Thirty days prior to construction activities in coastal scrub, chaparral, riparian habitats, or other areas supporting these species, qualified biologists shall conduct surveys to capture and relocate individual coast horned lizard, silvery legless lizard, coastal whiptail, rosy boa, San Bernardino ringneck snake, and coast patch-nosed snake in order to avoid or minimize take of these special-status species. The plan shall require a minimum of three surveys conducted during the time of year/day when each species is most likely to be observed. Individuals shall be relocated to nearby undisturbed areas with suitable habitat. If construction is scheduled to occur during the low-activity period (generally December through February) the surveys shall be conducted prior to this period if possible, and exclusion fencing shall be placed to limit the potential for re-colonization of the site prior to construction. The qualified biologist will be present during ground-disturbing activities immediately adjacent to or within habitat that supports populations of these species. Clearance surveys for special-status reptiles shall be conducted by a qualified biologist prior to the initiation of construction each day.	

Project Impacts	Recommended Mitigation Measures	Residual Impact
4.2 BIOLOGICAL RESOURCES (CONTINUED)		
	MM 4.2-13: Thirty days prior to construction activities, a qualified biologist shall conduct CDFG protocol surveys to determine whether burrowing owl is present at the site. The surveys shall consist of three site visits and shall be conducted in areas dominated by disturbed habitat and grasslands, or if such habitats occur within 500 feet of a construction zone. If located, occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by CDFG verifies through non-invasive methods that either the birds have not begun egg laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent survival. If burrowing owls are detected but nesting is not occurring, construction work can proceed after any owls have been evacuated from the site using CDFG-approved burrow closure procedures and after alternative nest sites have been provided in accordance with the CDFG Staff Report on Burrowing Owl Mitigation (10-17-95). Unless otherwise authorized by CDFG, a 500-foot buffer, within which no activity will be permissible, will be maintained between project activities and nesting burrowing owls during the nesting season. This protected area will remain in effect until August 31 or at CDFG's discretion and based upon monitoring evidence, until the young owls are foraging independently.	

Project Impacts	Recommended Mitigation Measures	Residual Impact
4.2 BIOLOGICAL RESOURCES (CONTINUED)		
	MM 4.2-14: No earlier than 30 days prior to the commencement of construction activities, a pre-construction survey shall be conducted by a qualified biologist to determine if active roosts of special-status bats are present on or within 300 feet of the project disturbance boundaries. Should an active maternity roost be identified (in California, the breeding season of native bat species is generally from April 1 through August 31), the roost shall not be disturbed and construction within 300 feet shall be postponed or halted, until the roost is vacated and juveniles have fledged. Surveys shall include rocky outcrops, caves, structures, and large trees (particularly trees 12 inches in diameter or greater at 4.5 feet above grade with loose bark or other cavities). Trees and rocky outcrops shall be surveyed by a qualified bat biologist (*i.e.*, a biologist holding a CDFG collection permit and a Memorandum of Understanding with CDFG allowing the biologist to handle bats). If active maternity roosts or hibernacula are found, the rock outcrop or tree occupied by the roost shall be avoided (*i.e.*, not removed) by the project. If avoidance of the maternity roost must occur, the bat biologist shall survey (through the use of radio telemetry or other CDFG approved methods) for nearby alternative maternity colony sites. If the bat biologist determines in consultation with and with the approval of CDFG that there are alternative roost sites used by the maternity colony and young are not present then no further action is required. If a maternity roost will be impacted by the project, and no alternative maternity roosts are in use near the site, substitute roosting habitat for the maternity colony shall be provided on, or in close proximity to, the project site no less than three months prior to the eviction of the colony. Large concrete walls (*e.g.*, on bridges) on south or southwestern slopes that are retrofitted with slots and cavities are an example of structures that may provide alternative potential roosting habitat appropriate for maternity colonies. Alternative roost sites must be of comparable size and proximal in location to the impacted colony. CDFG shall also be notified of any hibernacula or active nurseries within the construction zone.	

Project Impacts	Recommended Mitigation Measures	Residual Impact
4.2 BIOLOGICAL RESOURCES (CONTINUED)		
	MM 4.2-14: (continued) If non-breeding bat hibernacula are found in trees scheduled to be removed or in crevices in rock outcrops within the grading footprint, the individuals shall be safely evicted, under the direction of a qualified bat biologist, by opening the roosting area to allow airflow through the cavity or other means determined appropriate by the bat biologist (*e.g.*, installation of one-way doors). In situations requiring one-way doors, a minimum of one week shall pass after doors are installed and temperatures should be sufficiently warm for bats to exit the roost because bats do not typically leave their roost daily during winter months in southern coastal California. This action should allow all bats to leave during the course of one week. Roosts that need to be removed in situations where the use of one-way doors is not necessary in the judgment of the qualified bat biologist in consultation with CDFG shall first be disturbed by various means at the direction of the bat biologist at dusk to allow bats to escape during the darker hours, and the roost tree shall be removed or the grading shall occur the next day (*i.e.*, there shall be no less or more than one night between initial disturbance and the grading or tree removal). These actions should allow bats to leave during nighttime hours, thus increasing their chance of finding new roosts with a minimum of potential predation during daylight. If an active maternity roost is located on the project site, and alternative roosting habitat is available, the demolition of the roost site must commence before maternity colonies form (i.e., prior to March 1) or after young are flying (i.e., after July 31) using the exclusion techniques described above.	
	MM 4.2-15: Any special-status species bat day roost sites found by a qualified biologist during pre-construction surveys conducted per **MM 4.2-19** to be directly (within project disturbance footprint) or indirectly (within 300 feet of project disturbance footprint) impacted are to be mitigated with creation of artificial roost sites. The project applicant shall establish (an) alternative roost site(s) within suitable preserved open space located at an adequate distance from sources of human disturbance.	

Project Impacts	Recommended Mitigation Measures	Residual Impact
4.2 BIOLOGICAL RESOURCES (CONTINUED)		
	MM 4.2-16 Thirty days prior to construction activities in grassland, scrub, chaparral, oak woodland, riverbank, and agriculture habitats, or other suitable habitat a qualified biologist shall conduct a survey within the proposed construction disturbance zone and within 200 feet of the disturbance zone for San Diego black-tailed jackrabbit and San Diego desert woodrat. If San Diego black-tailed jackrabbits are present, non-breeding rabbits shall be flushed from areas to be disturbed. Dens, depressions, nests, or burrows occupied by pups shall be flagged and ground-disturbing activities avoided within a minimum of 200 feet during the pup-rearing season (February 15 through July 1). This buffer may be reduced based on the location of the den upon consultation with CDFG. Occupied maternity dens, depressions, nests, or burrows shall be flagged for avoidance, and a biological monitor shall be present during construction. If unattended young are discovered, they shall be relocated to suitable habitat by a qualified biologist. The applicant shall document all San Diego black-tailed jackrabbit identified, avoided, or moved and provide a written report to CDFG within 72 hours. Collection and relocation of animals shall only occur with the proper scientific collection and handling permits.	

Project Impacts	Recommended Mitigation Measures	Residual Impact
4.2 BIOLOGICAL RESOURCES (CONTINUED)		
	MM 4.2-16: (continued) If active San Diego desert woodrat nests (stick houses) are identified within the disturbance zone or within 100 feet of the disturbance zone, a fence shall be erected around the nest site adequate to provide the woodrat sufficient foraging habitat at the discretion of the qualified biologist in consultation with CDFG. Clearing and construction within the fenced area will be postponed or halted until young have left the nest. The biologist shall serve as a construction monitor during those periods when disturbance activities will occur near active nest areas to ensure that no inadvertent impacts to these nests will occur. If avoidance is not possible, the applicant will take the following sequential steps: (1) All understory vegetation type will be cleared in the area immediately surrounding active nests followed by a period of one night without further disturbance to allow woodrats to vacate the nest, (2) Each occupied nest will then be disturbed by a qualified wildlife biologist until all woodrats leave the nest and seek refuge off site, and (3) The nest sticks shall be removed from the project site and piled at the base of a nearby hardwood tree (preferably a coast live oak or California walnut). Relocated nests shall not be spaced closer than 100 feet apart, unless a qualified wildlife biologist has determined that a specific habitat can support a higher density of nests. The applicant shall document all woodrat nests moved and provide a written report to CDFG. All woodrat relocation shall be conducted by a qualified biologist in possession of a scientific collecting permit.	

Project Impacts	Recommended Mitigation Measures		Residual Impact
4.2 BIOLOGICAL RESOURCES (CONTINUED)			
	MM 4.2-17	Thirty days prior to construction activities in suitable habitat, a qualified biologist shall conduct a survey within the proposed construction disturbance zone and within 200 feet of the disturbance zone for American badger. If American badgers are present, occupied habitat shall be flagged and ground-disturbing activities avoided within 50 feet of the occupied den. Maternity dens shall be avoided during the pup-rearing season (February 15 through July 1) and a minimum 200-foot buffer established. This buffer may be reduced based on the location of the den upon consultation with CDFG. Maternity dens shall be flagged for avoidance, identified on construction maps, and a qualified biologist shall be present during construction. If avoidance of a non-maternity den is not feasible, badgers shall be relocated either by trapping or by slowly excavating the burrow (either by hand or mechanized equipment under the direct supervision of the biologist, removing no more than 4 inches at a time) before or after the rearing season (February 15 through July 1). Any relocation of badgers shall occur only after consultation with CDFG. A written report documenting the badger removal shall be provided to CDFG within 30 days of relocation. Collection and relocation of animals shall only occur with the proper scientific collection and handling permits.	
	MM 4.2-18	All lighting along the perimeter of natural areas shall be downcast luminaries with light patterns directed away from natural areas.	

Project Impacts	Recommended Mitigation Measures		Residual Impact
4.2 BIOLOGICAL RESOURCES (CONTINUED)			
	MM 4.2-19	Plant palettes proposed for use on landscaped slopes, street medians, park sites, and other public landscaped and Fuel Modification Zone areas within 100 feet of native vegetation types shall be reviewed by a qualified restoration specialist to ensure that the proposed landscape plants will not naturalize and require maintenance or cause vegetation type degradation in the open space areas (River Corridor SMA, High Country SMA, Salt Creek area, and natural portions of the Open Area). Container plants to be installed within public areas within 100 feet of the open space areas shall be inspected by a qualified restoration specialist for the presence of disease, weeds, and pests, including Argentine ants. Plants with pests, weeds, or diseases shall be rejected. In addition, landscape plants within 100 feet of native vegetation types shall not be on the Cal-IPC California Invasive Plant Inventory (most recent version) or on the list of Invasive Ornamental Plants listed in Appendix B of the SCP. The current Cal-IPC list can be obtained from the Cal-IPC web site (http://www.cal-ipc.org/ip/inventory/index.php). Landscape plans will include a plant palette composed of native or non-native, non-invasive species that do not require high irrigation rates. Except as required for fuel modification, irrigation of perimeter landscaping shall be limited to temporary irrigation (*i.e.*, until plants become established).	

Project Impacts	Recommended Mitigation Measures	Residual Impact
4.3 CULTURAL RESOURCES		
W & S Consultants, (W&S) conducted a cultural resource survey of the project site which included an archival record search conducted at the local California Historic Resource Information System (CHRIS) repository at the South Central Coastal Information Center (SCCIC) located on the campus of California State University, Fullerton. In July 2010, a field survey of the 1.2-mile proposed project site was conducted. The cultural resource report can be found in **Appendix 4.3**. Mitigation measures are recommended which would reduce potential impacts to unknown archeological resources within the project site, potential impacts to paleontological resources, and the discovery of human remains during construction to less than significant.	**MM 4.3-1** In the event that cultural resources are found during construction, activity shall stop and a qualified archaeologist shall be contacted to evaluate the resources. If the find is determined to be a historical or unique archaeological resource, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures or appropriate mitigation will be made available. Construction on other parts of the project site may proceed in accordance with Public Resources Code section 21083.2(i). **MM 4.3-2** If human remains are encountered during a public or private construction activity, other than at a cemetery, State Health and Safety Code 7050.5 states that no further disturbance shall occur until the Los Angeles County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The Los Angeles County Coroner must be notified within 24 hours. a. If the coroner determines that the burial is not historic, but prehistoric, the Native American Heritage Commission (NAHC) or other represented ethnic groups, must be contacted to determine the most likely descendent (MLD) for this area. The MLD may become involved with the disposition of the burial following scientific analysis. **MM 4.3-3** During grading activities, in the unlikely event that paleontological resources are found, a paleontologist will be notified to stabilize, recover, include laboratory preparation, analysis, cataloging, curation, and final acceptance to a legal repository will be required. Those findings shall be included in a Report of Findings, which documents the results of monitoring service activities, to the Department of Community Development Planning Division. If isolated artifacts, archaeological sites (prehistoric and/or historic), or features are located; laboratory preparation, analysis, cataloging, curation, and final acceptance to a legal repository will be required, and those findings shall be included in the aforementioned Report of Findings, in order to fulfill the federal and state regulations and requirements. **MM 4.3-4** Prior to grading activities, a paleontologist shall be retained to monitor construction activities.	Less than significant

Project Impacts	Recommended Mitigation Measures		Residual Impact
4.4 GEOLOGY AND SOILS			
Soils on the project site are subject to landslides, erosion, hydro-compression, and expansion. The project site also may be subject to ground shaking due to its location within a seismically active region; however, the project site is not underlain by any faults and, therefore, not subject to fault rupture. Based on the results of the geotechnical investigation of the project site, significant impacts could occur as a result of strong seismic ground shaking, landslides, soil expansion, and soil collapse. The proposed project would involve over 100,000 cubic yards of grading, which could also be a significant impact. However, with implementation of certain grading and construction techniques, outlined in the geotechnical report prepared for the proposed project and included within this section as mitigation measure, impacts would be reduced to a less than significant level. Cumulative impacts related to geotechnical hazards would also be less than significant.	**MM 4.4-1**	The potential for seismic settlement (dynamic densification) during future seismic events shall be evaluated during the planning and design stages in the alluvial, slopewash, and landslides area of the project site.	Less Than Significant
	MM 4.4-2	All mapped landslides shall be confirmed by subsurface exploration during the planning and design stages. All confirmed landslides shall be evaluated with respect to the proposed road alignment and specific mitigation measures shall be provided where necessary. Possible mitigation would include complete or partial removal, adding shear keyways, buttressing, or avoidance. Restricted Use Areas shall be established around any unmitigated landslide in open space areas.	
	MM 4.4-3	During the planning and design stages, additional geologic and geotechnical investigations shall be performed to refine the three dimensional geometry and geotechnical characteristics of the various landslides within the landslide complex.	
	MM 4.4-4	See **MM 4.4-2**.	
	MM 4.4-5	Prior to issuance of a grading permit, additional hydro-compression or consolidation testing shall be conducted to aid in evaluation of settlement within identified geologic units during future geotechnical investigations for grading plans. Possible mitigation of settlement of project soils would include removal and recompaction of loose or soft material.	
	MM 4.4-6	Expansive materials at the site shall be evaluated by the project Geotechnical Engineer during the grading plan stage of development. Expansion potential of site soils can be mitigated by controlling the water content and density of fill soils, by specifying embedment and reinforcement of structures, and by removing the expansive materials and replacing them with compacted material with low expansion potential.	
	MM 4.4-7	The expansion index of the site materials shall be verified with laboratory testing at the grading plan stage. If expansive materials are encountered, options to mitigate potential adverse effects include special foundation designs and reinforcement, removal and replacement with soil with low to non-expansive characteristics, or treatment with additives to lower the expansion potential.	

Project Impacts	Recommended Mitigation Measures	Residual Impact
4.5 CLIMATE CHANGE		
The global climate change assessment for the proposed Via Princessa East Extension Project ("project" or "proposed project"), located in the City of Santa Clarita, California, was prepared in accordance with the South Coast Air Quality Management District's (SCAQMD) California Environmental Quality Act (CEQA) Air Quality Handbook and other guidance and other guidance provided by the SCAQMD, which the City has adopted for purposes of CEQA analysis and thresholds of significance. The proposed project consists of the extension of the Via Princessa roadway to make it one of the primary east-west arterials through the City of Santa Clarita. The project is about 1.2 miles in length and would be a six-lane roadway with sidewalks on each side of the roadway and would include a two-lane bike path along the south side. The criteria for determining the significance of impacts related to greenhouse gas (GHG) emissions are provided in the environmental checklist form in Appendix G of the *State CEQA Guidelines*. As of this date, neither the SCAQMD Governing Board nor the County has formally adopted a significance threshold for assessing the impacts from a residential or commercial project's GHG emissions. The SCAQMD has formed a Greenhouse Gas CEQA Significance Threshold Stakeholder Working Group in order to provide guidance to local lead agencies on determining significance of GHG emissions in CEQA documents. The Working Group has released draft recommendations that suggest evaluating projects using a screening level of GHG emissions. Projects that do not exceed the screening level would be considered less than significant. Projects that exceed the screening level would be required to implement mitigation measures to reduce the emissions. Although a significance threshold has not been formally adopted, the Working Group draft recommendations represent the best available information with which to evaluate the project's significance with respect to GHG emissions and climate change. The impacts associated with construction and operation of the proposed project were compared to the draft recommended screening levels. Based on the results of the global climate change assessment, construction and operational emissions of the proposed project would not exceed the SCAQMD Working Group draft recommended screening level 3,000 metric tons of carbon dioxide equivalents ($MTCO_2e$) per year. Furthermore, the project would not conflict with applicable plans, policies, and regulations adopted for the purpose of reducing the emissions of greenhouse gases. The project would result in impacts to GHG emissions and climate change that would be considered less than significant.	**MM 4.5-1:** The proposed project shall use energy-efficient lighting, such as light-emitting diodes, on all streetlights and traffic signals. **MM 4.5-2:** The proposed project shall replace trees removed during construction. Replacement trees shall be native and drought-tolerant. **MM 4.5-3:** The proposed project shall prohibit idling of diesel-fueled vehicles during construction in accordance with CARB's Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling. **MM 4.5-4:** The proposed project shall divert construction debris to the maximum extent.	Less than significant

Project Impacts	Recommended Mitigation Measures	Residual Impact
4.6 HAZARDS AND HAZARDOUS MATERIALS		
The proposed Via Princessa East Extension project would not involve the transport, use, or disposal of hazardous materials. A Phase I Environmental Site Assessment (ESA) was prepared for the proposed project to determine if there are any environmental conditions at the project site that would include the presence of any hazardous substances or petroleum products under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water. No conditions were observed during site reconnaissance that would be expected to affect the project site and database searches did not identify any conditions that would affect the proposed project. The proposed project would not result in a significant impact related to human-made hazards.	Impacts would be less than significant and no mitigation measures are recommended.	Less than significant
4.7 HYDROLOGY		
The proposed stormwater drainage system for the proposed Via Princessa project would consist of curb and gutters, catch basins, and storm drain culverts crossing the proposed Via Princessa extension. Implementation of the proposed drainage system and compliance with state and local regulations would effectively regulate flow, velocity, and quality of stormwater runoff from the site. As a result, impacts related to drainage patterns, watercourses, erosion, and water quality would be less than significant.	**MM 4.7-1** Final design plans for the inlet structures shall be submitted to, and reviewed and approved by, the City of Santa Clarita Public Works Department.	Less Than Significant
4.8 LAND USE		
The project site is located in the City of Santa Clarita approximately 2 miles north of State Route 14 between Golden Valley Road in the west and Sheldon Avenue in the east. The City of Santa Clarita Land Use Map, designates the project site as BP (Business Park) and UR5(Urban Residential – minimum 19 dwelling units per acre, maximum 30 dwelling units per acre). The City's Zoning Map, shows that the project site is zoned for Business Park and Residential Low uses. The City's Land Use Element (September 2010), designates the project site as BP (Industrial) and UR5 (Urban). The proposed Via Princessa East Extension is designated as a Major Arterial Highway in the City's Master Plan of Arterial Highways. Implementation of the proposed project would not conflict with the goals, policies, or objectives of the City of Santa Clarita General Plan. The proposed project also would not conflict with the City's Unified Development Code, the Southern California Association of Governments (SCAG) Regional Transportation Plan Goals, or any habitat conservation plan or natural community conservation plan.	Impacts would be less than significant and no mitigation measures are recommended.	Less than significant

Project Impacts	Recommended Mitigation Measures	Residual Impact
4.9 NOISE		
The section addresses the potential noise impacts that could result from the Via Princessa East Extension Project ("proposed project" or "project"). Noise prediction modeling conducted in this analysis utilized the Federal Highway Administration (FHWA) Highway Noise Prediction Model (FHWA-RD-77-108). Modeling data referenced in this analysis is provided in **Appendix 4.9.** The closest sensitive receptors to the proposed project site are the existing single-family residential units along the western terminus of Via Princessa and Golden Valley High School, southeast of the project. Modeling concluded that construction generated noise levels would exceed residential land use noise level thresholds at the existing residential units northeast of the project site. Construction noise levels at Golden Valley High School would be within the threshold for noise levels at institutional land uses. The proposed project would be required to implement **Mitigation Measures 4.9-1** and **4.9-2** to reduce the noise levels that the existing residential units would be exposed to during project construction. Specifically, **Mitigation Measure 4.9-1** would require a construction sound wall to be developed between the construction boundary and the existing residential units to attenuate such construction noise levels. Construction noise levels can be expected to be as high as 90 dB(A) without sound walls. Construction generated noise levels with sounds walls can be expected to reach levels of 78.2 dB(A), which exceeds the 70 dB(A) noise level threshold. Therefore, construction impacts would remain temporarily significant and unavoidable. Construction would result in vibration impacts that would be less than the Federal Transit Administration's (FTA) published guidelines for assessing the impacts of ground-borne vibration associated with construction activities. The proposed project includes the development of a new roadway extension connecting the western terminus of Via Princessa to Golden Valley Road. This roadway would extend through land that is designated as Residential, Industrial under the existing City of Santa Clarita Land Use Map. During operation of the proposed project, noise levels are expected to be approximately 66.9 A-weighted decibels (dB(A)), which is well below the noise level thresholds for Residential and Industrial. Therefore, operational impacts due to implementation of the proposed project would be less than significant.	**MM 4.9-1** The construction contractor shall construct a 10-foot-tall temporary noise barrier on the northeastern perimeter of the proposed project site, separating the existing single-family residential units from the existing western terminus of Via Princessa. The installation of the noise barrier shall occur prior to commencement of Phase 1 construction and left in place through the end of Phase 4 to reduce the noise levels at the effected residential homes. The noise barrier shall be constructed in a manner such that the line-of-sight is blocked between construction activities on the proposed project site and the adjacent single-family residential units to the northeast of the project site. The noise barrier shall be made out of any outdoor weather-resistant solid material that meets a minimum sound transmission loss including: 16-gauge steel, 1-inch thick plywood, and any reasonable thickness of concrete. The use of the noise barrier between construction equipment and the sensitive uses to northeast of the proposed project site would attenuate construction equipment noise levels as much as 11.8 dB(A) CNEL during each construction phase. **MM 4.9-2** The following specifications shall be included in the project plans approved by the City of Santa Clarita building permits: Best Management Practices (BMPs) shall be implemented by the contractor and sub-contractors to reduce construction noise as much as practicable. Two weeks prior to the commencement of construction, notification shall be provided to the residential land uses and institutional land uses near the project site disclosing an approximate construction schedule and describing the various activities that would be occurring during the construction period until completion. Such notification may be made by delivering the construction notice to each residential unit, or by posting it in a conspicuous place at the corner of Via Princessa and Sheldon Avenue and at the driveway entrance to Golden Valley High School. During the entire construction period, the contractor and sub-contractors shall comply with the following: • Ensure that construction equipment using gasoline or diesel engines shall be properly muffled according to industry standards and in good working condition. • Locate noise-generating construction equipment and staging areas away from sensitive uses when and where feasible.	Construction impacts would remain temporarily significant and unavoidable.

Project Impacts	Recommended Mitigation Measures	Residual Impact
4.9 NOISE (CONTINUED)		
Cumulative analysis indicated that two roadway segments in the project area would generate noise level increases that exceed 3.0 dB(A). Via Princessa east of Rainbow Glen would generate a cumulative noise level increase of 5.6 dB(A) while Golden Valley south of Via Princessa would generate a cumulative noise level increase of 3.2 dB(A). Project analysis indicates, however, that the proposed project would cumulatively contribute to a noise level increase along Via Princessa east of Rainbow Glen of 0.8 dB(A) and only cumulatively contribute to a 0.1 dB(A) noise increase along Golden Valley south of Via Princessa. Therefore, the proposed project would have a cumulatively less than significant impact.	**MM 4.9-2**: **(continued)** • Use electric air compressors and similar power tools rather than gasoline or diesel powered equipment when and where feasible. • Construction-related gasoline or diesel-powered equipment, including heavy-duty equipment, motor vehicles, and portable equipment shall be turned off when not in use for more than 30 minutes. • Construction hours, allowable workdays, and the phone number of the project superintendent shall be clearly posted at all construction entrances to allow surrounding property owners and residents to contact the project superintendent. • If the project superintendent receives a complaint from a surrounding owner or resident, the superintendent shall investigate the complaint, and if required or practical take appropriate corrective action, and report the action to the reporting party.	

Project Impacts	Recommended Mitigation Measures	Residual Impact
4.10 TRANSPORTATION AND CIRCULATION		
The section discusses the potential impacts to traffic and circulation as a result of the implementation of the proposed Via Princessa East Extension, which includes regional traffic growth pursuant to the City's buildout for the Santa Clarita Valley. Upon completion of the proposed project, safety and hazardous impacts would be less than significant. All traffic related impacts to intersections and roadways within the project study area would be mitigated to less than significant impacts with implementation of the proposed project. Potential cumulative transportation and circulation impacts, including potential impacts to roadway segments and project area intersections, would result in less than significant impacts with implementation of the proposed project. This section of the EIR summarizes the findings of the Via Princessa Extension Traffic Analysis prepared by Austin-Foust Associates, Inc., in April 2011. The traffic analysis is provided in **Appendix 4.10** of this EIR.	**MM 4.10-1** The City shall develop and implement a construction traffic control plan (CTCP) prior to the start of construction. The CTCP shall be completed by the City Engineer. Specific measures described in the CTCP shall conform to the Caltrans Manual on Uniform Traffic Control Devices (MUTCD) manual. Specific measures described in the MUTCD that are typically used in the CTCP are summarized below: • All traffic control measures, construction signs, delineators, etc., and their use during the construction phase of this project shall conform to the provisions set forth in the State of California, Department of Transportation, Manual of Traffic Controls, January 1992. • Prior to approval of final site design plans, the applicant shall coordinate with Metro to obtain input of a final CTCP. • In areas where traffic control necessitates, the contractor shall provide, post, and maintain "No Parking" and "No Stopping" signs, as directed by the Director of Public Works. • The location of all signs shall be determined in the field by the City Engineer in conjunction with the contractor. • No travel lane shall be less than 10 feet wide. • Delineators shall be spaced at 50 feet maximum, or as noted on the final CTCP. • Construction personnel shall have a designated place for parking, as identified in the final CTCP. • All traffic signal facilities shall be protected during construction or relocation. • "Construction Ahead" and appurtenant signs are to be placed 1,000 feet in advance of all approaches to the project area, for the duration of construction. • Private driveway closures shall be limited to the times of the day that construction is in progress. • Cross street closures shall be limited to the times of the day that construction is in process.	Less than significant

Project Impacts	Recommended Mitigation Measures	Residual Impact
4.10 TRANSPORTATION AND CIRCULATION (CONTINUED)		
	Operation	
	MM 4.10-2 The City of Santa Clarita shall improve segments of Golden Valley Road (between Soledad Canyon Road and Sierra Highway) and Via Princessa (between Whites Canyon Road and Sierra Highway) to their planned ultimate six-lane configuration within the Interim Year horizon period, as funding becomes available.	
	MM 4.10-3 Prior to the completion of construction of the proposed project, the City of Santa Clarita shall install a traffic signal at the Rainbow Glen Drive/Via Princessa intersection.	
	MM 4.10-4 Prior to the completion of construction of the proposed project, the City of Santa Clarita shall install a traffic signal at the Via Princessa and Golden Valley Road intersection.	
	MM 4.10-5 One year after completion of the Via Princessa Roadway extension, the City's traffic engineer shall evaluate future traffic patterns around Rainbow Glen Drive and Isabella Parkway through standard City practices, including but not limited to plan checks and the collection of future traffic data to determine if traffic calming measures would be needed.	

Project Impacts	Recommended Mitigation Measures	Residual Impact
4.11 VISUAL RESOURCES		
This section describes the existing visual character of the Via Princessa project site and surroundings, and evaluates the potential changes in the visual character as a result of implementation of the proposed project. The project site presently is predominantly vacant, and is surrounded by mostly residential uses to the northeast, open space and commercial uses to the north, Golden Valley Road to the west, and Golden Valley High School to the south. The proposed project would not significantly alter the visual characteristics of the scenic vistas visible from various vantage points surrounding the project site. While the proposed project is located between existing residential and commercial developments and is not removing or replacing prominent visual features, the image of the roadway, landscaping, and other human activity would be a significant change from the existing site characteristics, which could be viewed as a substantial adverse visual impact. Drought-tolerant, native, and non-native landscaping would be incorporated throughout the project site. Project development would also introduce sources of outdoor illumination that do not presently exist. Outdoor lighting, such as streetlights and traffic signals, are essential safety features in roadway projects, and such lighting cannot be eliminated if the proposed project is implemented. Despite the recommended mitigation measures, which would reduce the impacts to a certain extent, the identified significant visual impacts would still result from the change in the visual character of the site from open space to urban. There is no feasible mitigation beyond that already identified for the proposed project to reduce the identified impacts to a level below significant. Consequently, such significant visual impacts would remain significant and unavoidable. The proposed project and other development in the City of Santa Clarita would transform the character of the area by adding urban uses in currently undeveloped areas, including hillside areas. Consequently, the project's contributions to cumulative visual character and quality and to light and glare impacts are considered to be significant and unavoidable.	**MM 4.11-1** The City, or designee, shall require that the use of nighttime lighting during project construction be limited to only those features on the construction site requiring illumination. **MM 4.11-2** The City, or designee, shall require that all security lights be properly shielded and projected downwards during construction, such that light is directed only onto the work site. **MM 4.11-3** The City, or designee, shall require that all lighting along the project site boundary consist of low-intensity downlights, or be equipped with louvers, shields, hoods, or other screening devices, in accordance with the City's Municipal Code.	Significant and Unavoidable